

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Hideto Ohnuma et al. Art Unit : Unknown
Serial No. : Unassigned Examiner : Unknown
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Title : METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE

Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

In the claims:

Amend claims 1-6, 8-10 and 18-27 as follows:

1. A method of manufacturing a semiconductor device, the method comprising:
forming a conductive film over a semiconductor with an insulating film therebetween;
forming a resist pattern on the conductive film by using a photomask having a diffraction
grating pattern or a reticle having a diffraction grating pattern, wherein a thickness of an edge
portion of the resist pattern is smaller than a thickness of a middle portion of the resist pattern;
forming a gate electrode by etching using the resist pattern, wherein a thickness of an
edge portion of the gate electrode is smaller than a thickness of a middle portion of the gate
electrode; and

introducing an impurity element into the semiconductor with the gate electrode as a mask
to form a first impurity region and a second impurity region in the semiconductor, wherein the
first impurity region is not overlapped with the gate electrode and the second impurity region is
overlapped with the edge portion of the gate electrode.

2. A method of manufacturing a semiconductor device, the method comprising:
forming a conductive film over a first semiconductor and a second semiconductor with an
insulating film therebetween;
forming a rectangular first resist pattern on the conductive film over the first
semiconductor;
forming a second resist pattern on the conductive film over the second semiconductor by
using a photomask having a diffraction grating pattern or a reticle having a diffraction grating